

N. J. Railroads (Cunningham articles)
RAILROADING
in New Jersey

The Camden & Amboy



Historic photograph shows the "John Bull" prior to 1892 when it was refinished by Pennsylvania Railroad for exhibition at World's Columbian Exposition in Chicago. Flaring smokestack and cab for engineer were added 20 years after engine's arrival from England. Picture at top of facing page, taken in 1893, shows train on view at exposition.

(New Jersey probably had a more important role in the establishment and development of railroads than any other state in the country. This article, the second of a series, deals with the founding of the Camden & Amboy by the Stevens brothers who followed in the footsteps of their illustrious father, Colonel John Stevens.)



This weatherbeaten stretch of old track, resting on original stone ties near Jamesburg, is all that remains of the old Camden & Amboy line. Wrought iron plates on which rails rested have disappeared.

AFTER two years of increasing pressure, the New Jersey Legislature, on February 4, 1830, granted the Camden and Amboy Railroad and Transportation Company a charter for the state's first commercial railroad, to link Raritan Bay and the Delaware River.

Public enthusiasm for a railroad in New Jersey far outran legislative conservatism. Meetings in Mt. Holly, Burlington, Bordentown, Princeton and Trenton, among other places, had soundly approved the projected Camden and Amboy. Plenty of capital was on hand to make the enthusiasm practical.

On the other hand, canal promoters and stage owners had kept up a hard-hitting fight against the railroad. They insisted a railroad would ruin thousands of people—stage drivers, road workers, tavern owners, horse breeders and hay farmers (not to mention canal promoters and stage owners).

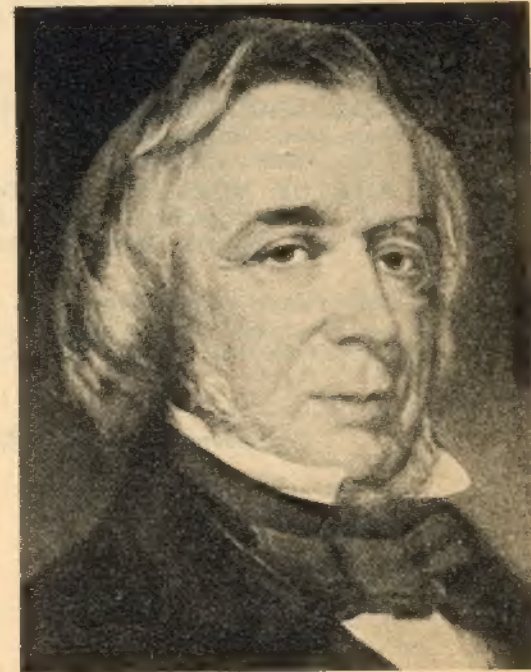
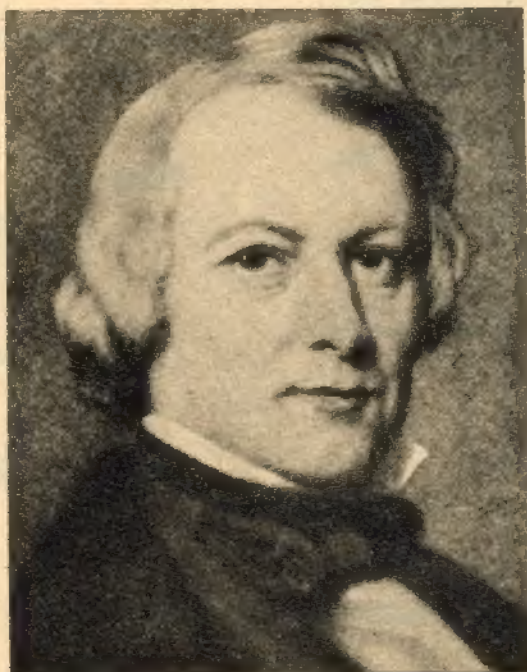
Still, it was a railroad victory of a

somewhat limited sort. On the very day the Legislature granted the C. & A. charter it also approved a charter for the Delaware and Raritan Canal over almost the same route.

PERSUASIVE though the canal backers were in getting their project jointly chartered, somewhat less ready were they when stocks were on the line. After the first few days of raising money in Trenton, Princeton and New Brunswick, only \$100,000 worth of Delaware and Raritan stock was bought, and it took a full year to sell all of it. In contrast, the entire railroad stock, amounting to \$1,000,000, was subscribed in 10 minutes.

Leading Camden and Amboy spirits were the Stevens "boys," Robert L. and Edwin A., sons of progressive old Colonel John Stevens of Hoboken. Robert was elected president and appointed chief engineer, Edwin was elected treasurer.

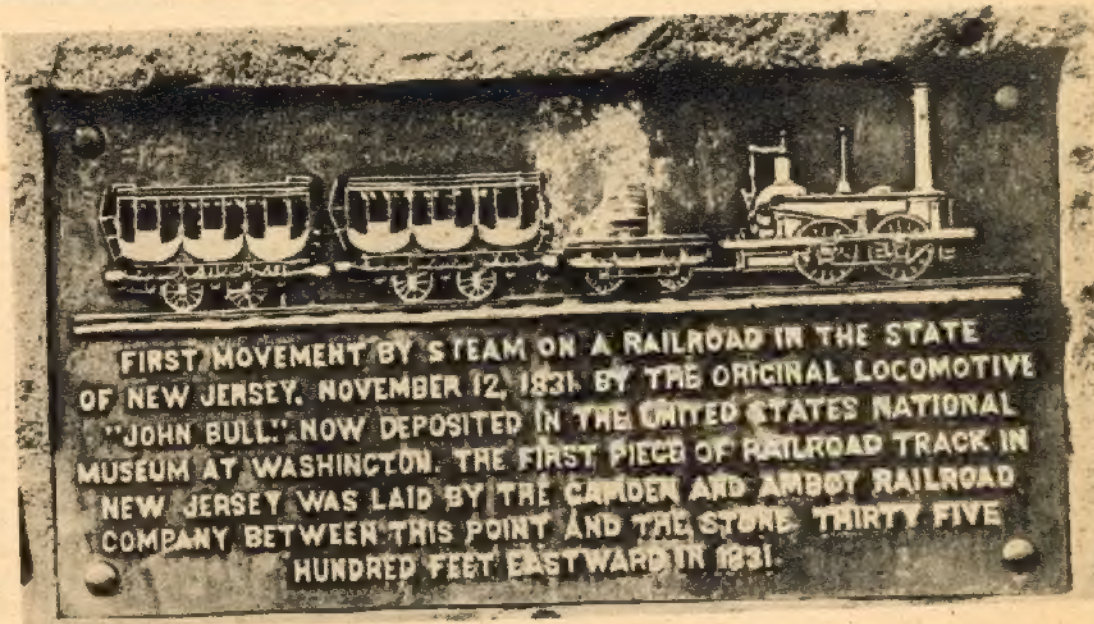
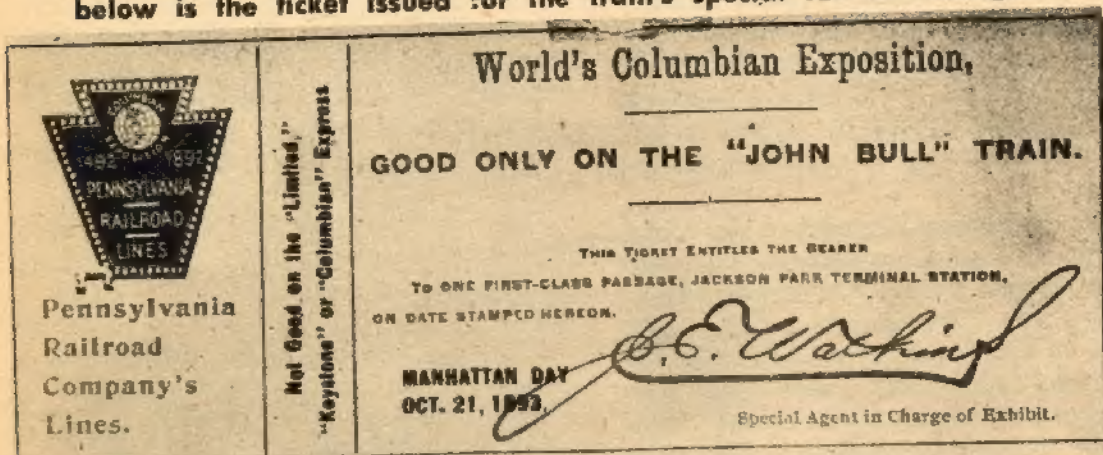
C. & A. promoters had reason to be optimistic. Written into their charter



Robert L. (left) and Edwin A. Stevens, leading figures in founding the C. & A. Robert, president of the line, invented the T-rail—essentially the same now used except for weight and height changes.



A relic of early railroading, the C & A "1" is shown on a siding at the Chicago Exposition. The two coaches behind the "John Bull" are 1836 models. One is the original car, the body of which was used as a chicken coop at South Amboy for many years. Reproduced below is the ticket issued for the train's special run to Chicago.



Stevens 'Boys' Fulfilled Father's Plans by Obtaining One of First Charters for a Cross-Jersey Railroad BY JOHN T. CUNNINGHAM

was a "monopoly" clause which threatened to rend the state in two before it was ended almost 40 years later.

NO taxes were to be paid by the company. Instead, the charter stipulated that the state would receive a flat fee of 10 cents for every passenger transported, 15 cents for every ton of freight. The joker: The transit duties were to cease if the Legislature approved "any other road to transport passengers from Philadelphia to New York to terminate within three miles of the commencement or termination of this road."

Two years later the Legislature went even further—the statute was amended to provide that during the length of the charter it should be unlawful to construct any railroad between Philadelphia and New York without the consent of the now legally "married" railroad and canal companies.

Monopoly was to become an ugly word—a vicious word—before the state got rid of it, but then it was the order of the day. Who could expect a man to put up his cash on an untried idea if in a couple of years a competing line should be built alongside to cut in on possible profits?

COLONEL JOHN STEVENS had visualized New Brunswick and Trenton as terminals for the cross-state road; his sons chose South Amboy and Bordentown, with Camden somewhat of an afterthought—a terminal to be used only when ice jammed the Delaware and kept the Philadelphia and New York steamboats in port.

It was a confident and happy Robert Stevens who boarded the Black Ball sailing packer "Hibernia" in the Fall of 1830 on his way to England to buy rails and equipment. Surveys proved construction between Bordentown and South Amboy would be easy.

Stevens now turned his attention to making the Camden and Amboy a first-rate railroad.

ONE worry nagged his mind. He knew that strap iron rail mounted on wooden planks wouldn't stand up in rough weather and couldn't stand the continuous pounding he expected his locomotives to exert. He realized that America didn't have the iron workers to make the heavy standard British rail. Something revolutionary in track design was in order.

Borrowing a chunk of pine wood from the ship's carpenter, Stevens began to whittle slowly with his horn-handled jack knife. Countless hours later he held in his hands a wooden model of the first crude T-rail—essentially the same rail used today except for changes in weight and height. Later the Stevens knife carved out the "hook-headed" spike and the "iron tongue" (or "fish plate") to join rails. These, too, are used today with little change.

TEMPORARILY Stevens put aside looking at English steam locomotives in his eagerness to have the rails made. There wasn't an English mill willing to take the risk of ruining its equipment with the T-rail. Stevens turned to Wales, looked up an old friend of his father.

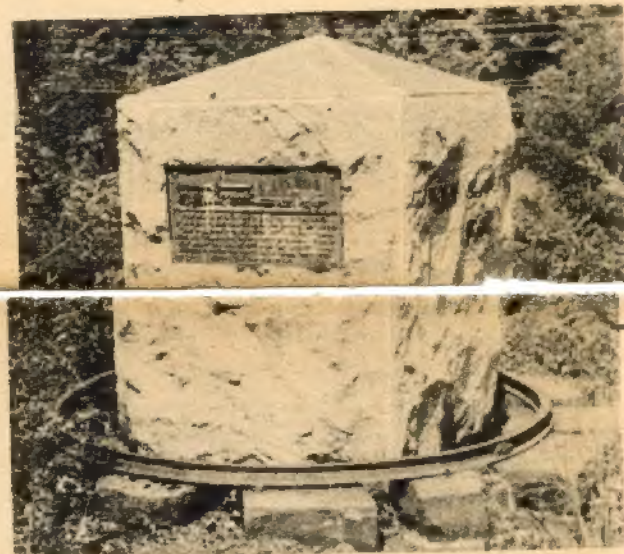
The canny Welshman was glad to see a son of the colonel, but friendship could be carried too far. No rails, sir. "I'll pay damages," said Robert. Well, in that case . . .

The Welshman shook his head as the rails came out of the rollers, "twisted and crooked as snakes." Stevens stayed with him and between them they devised a method of straightening the rails while they were still hot. In May, 1831, the first of 23 ships laden with the 16-foot, 36-pound rails sailed for Bordentown

(Continued on Following Page)

Camden & Amboy Railroad monument erected in 1891 at Bordentown by the Pennsylvania Railroad to mark the 60th anniversary of "John Bull's" first ride.

Around its base are stone blocks from original road-bed supporting steel ring made from original rail. Commemorative tablet is shown in closeup above.



Dr. Richard P. McCormick, assistant history professor at Rutgers and president of the New Jersey Historical Society, with two of the society's railroad exhibits—Stevens rail and older strap-rail.

JERSEY RAILROADS—The Camden & Amboy

(Continued from Preceding Page)

One of the packets never arrived—its bottom was pounded out off the coast by the heavy rails.

Stevens tarried in England only long enough to watch George Stevenson and his son test their new locomotive, the "Planet." He ordered a similar engine, the "John Bull," and headed home.

BORDENTOWN was hot and humid on the August day in 1831 when the "John Bull" arrived. The wharf of the little river village was crowded as Bordentown folk gathered to see the English devil.

They were doomed to disappointment. Instead of an engine the ship's master put ashore only a mound of packing crates. The "John Bull" was in pieces—and there were no drawings to guide the ingenious 22-year-old Yankee, Isaac Dripps, assigned to put the "Bull" together.

Young Dripps had never even seen a locomotive and had only limited experience with steamboat engines. Yet in his hands the pieces began to take shape; early in November the 10-ton engine stood on the tracks outside of Bordentown. A tender improvised from a flat car carried a whisky barrel as a water tank and a Bordentown shoemaker cut and sewed short lengths of leather hose to carry water to the boilers.

BORDENTOWN'S shaded streets were a trying place for serious young Dripps. Comments ranged from goodnatured ridicule to open hostility. Village loafers made great fun at the expense of the "iron horse" and its "keepers."

Most people were still frankly skeptical that a hulk of iron could be moved by steam. "It's like a tea kettle," ran one argument. "What if the kettle lid does flop up and down when it steams? The kettle doesn't move, no matter how hot the fire, no matter how full the kettle."

Nevertheless, the river front was agog on November 12, 1831, the day "John Bull" was to be unleashed. State legislators had been invited to risk their necks in the carriage behind the "John Bull." Every one from miles around who could move was in "Mile Hollow," where the test was to be made, and even those who feared or hated the engine were willing to file by the long tables laden with hot oyster soup and other refreshments. (Stevens thus probably qualified as the first railroad public relations man, too).

WHEN Dripps and fireman Ben Higgins boarded the "John Bull" the timid moved back from the explosion they believed imminent. Some of the legislators had to overcome a similar powerful wish to retreat before they climbed aboard the coaches.

Dripps pumped the boiler full of

water as Higgins tossed great chunks of pine wood into the firebox. Black smoke puffed from the stack, wood ashes settled on the crowd. The steam scale edged up. At the precise instant when it hit 30 pounds Dripps opened the throttle. Off moved "John Bull."

Officialdom satisfied, Stevens offered a ride to all comers. Up stepped bubbling, eye-filling Madame Murat, wife of Prince Murat and niece by marriage of Napoleon, determined to be the first woman in New Jersey to ride on a steam railway. She gathered her skirts and mounted the steps to the high coach, with just a hint of ankle showing. Even in 1831 a pretty girl was an asset for the maiden run of a new train.

THE New Jersey Gazette said the legislators were "gratified" with the railroad, which drew the coaches "with great velocity." When the railroad was finished to Amboy, the Gazette speculated, it would travel at "the rate of a mile in two minutes—and some say less!"

Rails reached Hightstown in the Fall of 1832 and carriage-like passenger cars seating 18 passengers were put in operation, gliding "in fine style rapidly along the rails, drawn by two horses in tandem harness," the Gazette said.

Stone blocks were coming through slowly from Sing Sing Prison, and

out of the way soon became apparent and the cow-catcher was here to stay.

Passengers reached South Amboy in December, 1832. By mid-January, 1833, the first freight was operating over the line, with both passengers and freight drawn by teams of fast horses, operating in relays across the state.

The following September the "John Bull" was ready to haul its first pay load across state. Eastbound everything was fine, despite a light rain, but on the return trip the engine hit a wandering hog. The hog was separated from its head and the "John Bull" landed in a ditch. The only

horses, \$3 for steam. Steamboats provided the links on either end.

Speed was the order. Seven hours from Philadelphia to New York by locomotive, nine by horse. Some passengers, used to leisurely stage travel, said the ride was too fast, insisted on occasional stops. Baggage was put in locked compartments on rollers so that a quick transfer—less than five minutes—could be made from train to steamboat.

THE public responded. In its first year the Camden and Amboy carried 110,000 people; five years later that was up to 165,000.

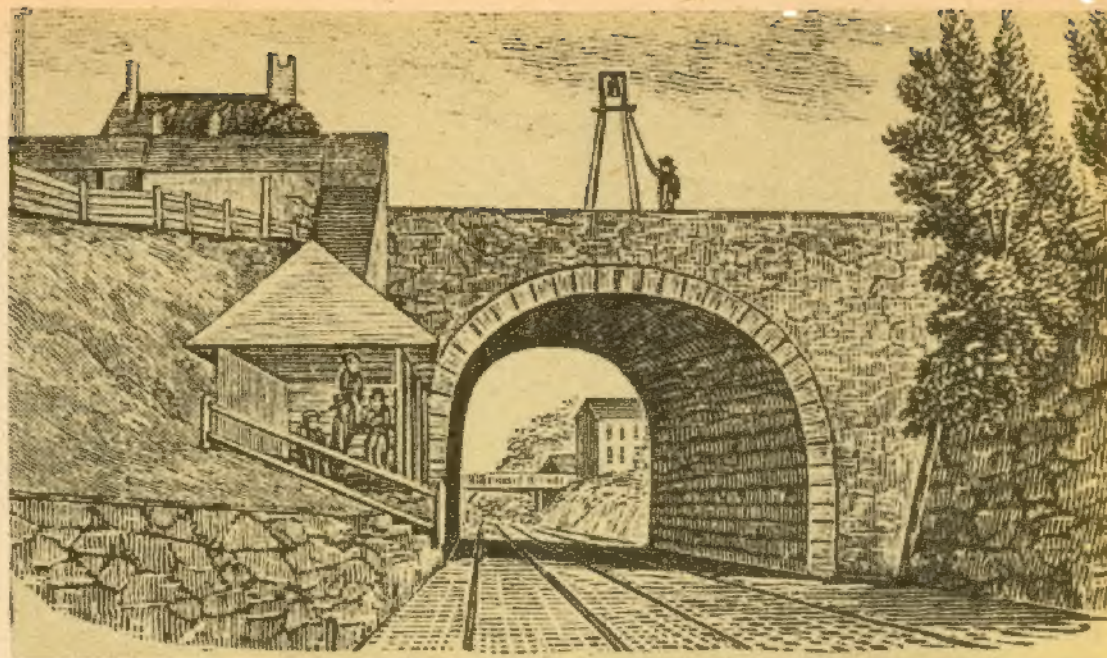
It was an indulgent public, however, because this was primitive railroad-ing. The line was singletracked all the way, with numerous turnouts provided. A post between turnouts was the deciding factor when trains met—whichever engine had passed the post had the right of way, the other had to back to a siding. When head-on wrecks brought a storm or protest a "schedule" of a sort was set up to force a train to wait on a siding, but engineers often grew tired of waiting and went on, usually to another wreck.

A serious Camden & Amboy accident in the Fall of 1833 threatened the lives of two illustrious men—John Quincy Adams and Cornelius Vanderbilt. Two persons were killed when a forward axle broke on one of the cars as the train sped along at 25 miles per hour. Adams escaped completely but Vanderbilt had his chest crushed. He survived, however, to make railroad history of his own at a later day.

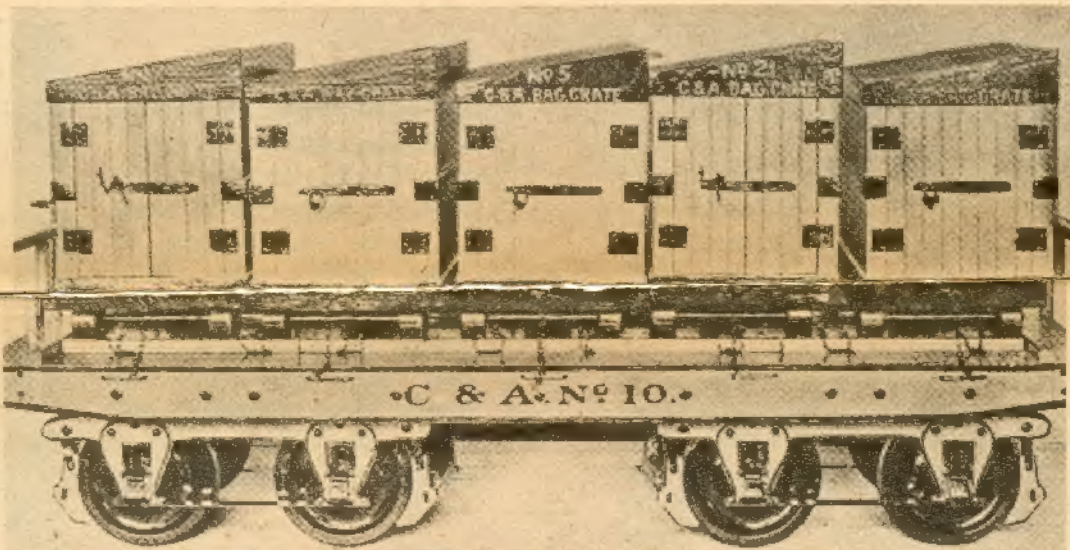
BY 1837 it became obvious that the route through little Hightstown and Jamesburg was illogical. Places like New Brunswick, Princeton and Trenton demanded service. Within two years a new straight line had been laid across the state and a connection made with Bordentown. In 1840 the first train ran through from Jersey City to Philadelphia—by way of the New Jersey Railroad to New Brunswick, over the Camden and Amboy to Trenton and down to Philadelphia on the Philadelphia and Trenton. This is the route of the mighty Pennsylvania Railroad today.

The "John Bull," meanwhile, worked continuously until 1866. Then in 1892 it was taken out of the shops and refinished. In Middlesex County one of the two original coaches was found serving as a chicken coop. A duplicate was built and old "John Bull" hauled both coaches 930 miles across country to the Columbian Exposition at Chicago—just to prove there was life in the old bull yet. Having proved it, the Pennsylvania had the old locomotive put away for good, in the Smithsonian Institution in Washington.

Next Sunday: Meadows Railroads
JANUARY 14, 1951



No grade crossing—the archway of a C & A overpass at Bordentown.



One of the early C & A baggage cars showing how individual compartments were mounted on wheels to facilitate handling at end of line.

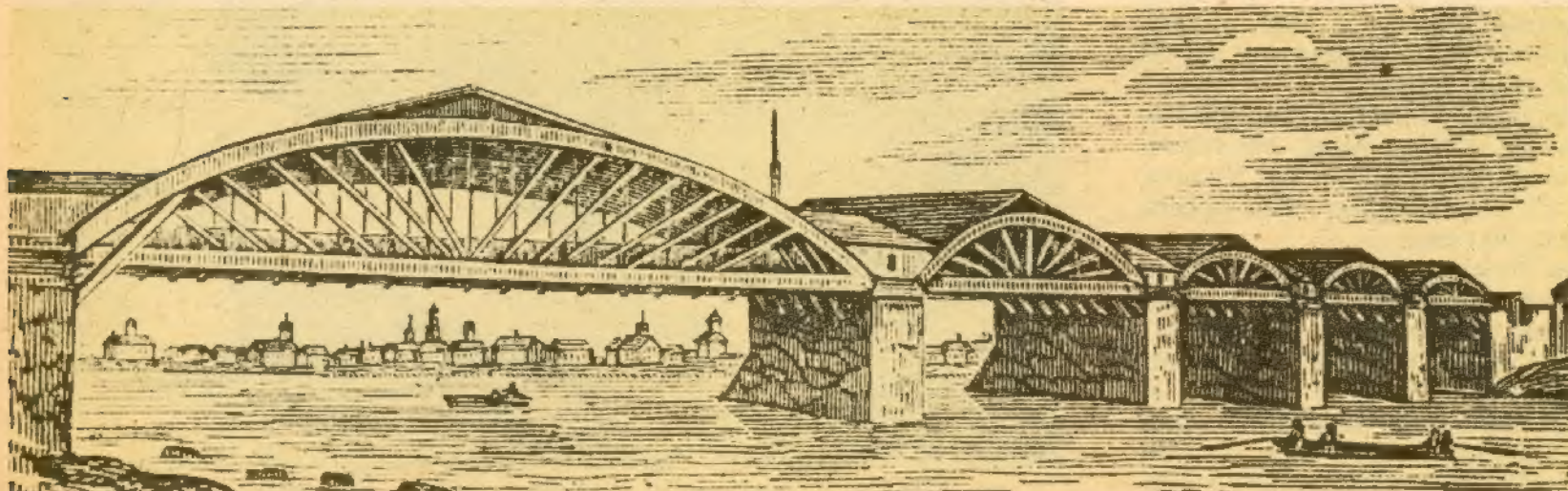
Stevens, anxious to reach Amboy by Winter, resorted in desperation in the Amboy cut to logs laid across the line. Broken rock was solidly packed around the logs. Thus, by accident (and the slowness of prison workmen) Stevens devised the modern road bed.

STEVENS and Dripps also gave the country its first "cow catcher," again somewhat by accident. They found their engine had difficulty staying on the rails on curves because of its short wheelbase and devised a pilot to run out in front. The fact that the pilot enabled their "Bull" to nudge bold cows (pigs, people, dogs and wagons)

casualty was a passenger who "summersetted" from his seat.

Before the "John Bull" made its first cross-state trip in 1833 the Camden and Amboy was building three more locomotives at Hoboken. One of these, planned by Robert Stevens and Isaac Dripps in collaboration, was put in operation in 1834. Their 30-ton giant, aptly named the "Monster," roared across the state on its big 48-inch drivewheels for years.

Camden was reached in January, 1834. Now three round trips a day were provided, two by horsedrawn trains until more locomotives were acquired. The through fare from Philadelphia to New York was \$2 for



Old sketch of Delaware River bridge at Trenton where the C & A connected with the Philadelphia and Trenton.